



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12N 9/10, 15/63, 5/14, 15/83, 15/82		A2	(11) International Publication Number: WO 00/53732 (43) International Publication Date: 14 September 2000 (14.09.00)
(21) International Application Number: PCT/US00/06456 (22) International Filing Date: 10 March 2000 (10.03.00)		(US). SPRINGER, Nathan, Michael [US/US]; 918 Washington Street, Northfield, MN 55057 (US); MUSZYNSKI, Michael, Gerard [US/US]; 5505 Shriver Avenue #2, Johnston, IA 50131 (US); PAPA, Charles, Marvin [US/US]; 903 Beacon Street #1, Madison, WI 53715 (US).	
(30) Priority Data: 60/123,888 11 March 1999 (11.03.99) US 60/169,858 9 December 1999 (09.12.99) US		(74) Agents: MUELLER, Lisa, V. et al.; Rockey, Milnamow & Katz, Ltd., Suite 4700, Two Prudential Plaza, 180 North Stetson Avenue, Chicago, IL 60601 (US).	
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/169,858 (CIP) Filed on 9 December 1999 (09.12.99)		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(71) Applicants (for all designated States except US): WISCONSIN ALUMNI RESEARCH FOUNDATION [US/US]; P.O. Box 7365, Madison, WI 53707-7365 (US). PIONEER HI-BRED, INTERNATIONAL, INC. [US/US]; Suite 800, 400 Locust Street, P.O. Box 800, Des Moines, IA 50306-3453 (US). REGENTS OF THE UNIVERSITY OF MINNESOTA [US/US]; 600 University Gate Way, 200 Oak Street S.E., Minneapolis, MN 55455 (US).		Published Without international search report and to be republished upon receipt of that report.	
(54) Title: CLASS II DNA METHYLTRANSFERASES OF ZEA MAYS			
(57) Abstract The present invention provides nucleic acids encoding polypeptides which encode a DNA methyltransferase. These nucleic acids can be used to stabilize transgene expression in transgenic plants, to alter the yield or biochemical qualities of plants to silencing targeted genes in plants <i>in vivo</i> .			